III. *An Improvement on the Practice of* Tapping; *whereby that Operation, inſtead of a Relief for Symptoms, becomes an* abſolute Cure *for an* Aſcites, *exemplified in the Caſe of* Jane Roman; *and recommended to the Conſideration of the* Royal Society, *by* Chriſtopher Warrick, *of* Truro, *Surgeon.*

Read Feb. 16. 1743-4.

AMONG all the Operations of Surgery, perhaps there is not one, of equal Importance, leſs oblig'd to Improvements, than that of the *Paracenteſis*; it being, at this time, notwithſtanding the frequent Uſe thereof, in the ſame State of Imperfection as when firſt introduced among us; a mere palliative Remedy, or a Relief for Symptoms. Mr. *Monro* and Mr. *Garengeot* have, indeed, thrown ſome conſiderable Lights thereon; the former, * by ſubſtituting a Belt, inſtead of the ordinary long Bandage for compreſſing the *Abdomen*, and in aſcertaining the proper Place of Puncture; the latter, in making the Evacuation at once, and in rinſing the emptied Cavity, to remove the feculent Part of the Waters; which, ſubſiding therein, and being apt, by its Acrimony, to make rude Impreſſions on the Viſcera, he ſays, † frequently occaſion Mortifications thereof. Theſe are, I believe, the only Improvements therein; at leaſt, that ſeem to

* *Vide* Medical Eſſays, Vol. I. *Art.* 18. † *Traité des Operations de Chirurgie*, Chap. 6. Art. 6. *de la Paracentheſe.*

have

have ſufficient Solidity in them to recommend themſelves to our Practice. Its proper Object, an *Aſcites*, however, ſtill baffles our Endeavours, and renders the Uſe of it contemptible and precarious; always aſſuring us of a Relapſe, by returning as conſtantly as ever we put this Method alone in Practice to remove it; ſo that, even in caſe of its being conſider'd as a palliative Remedy, or a Relief of the Symptoms, by repeating the Uſe of the *Trochar*, we muſt ſuppoſe, at the ſame time, an equal Certainty of Pain, continual Anxiety, and, perhaps, Death; which, at laſt, muſt be the inevitable Conſequence of it.

From theſe Conſiderations, and a ſincere Willingneſs to communicate to others what I think herein has been of Service to myſelf, I am inclined to believe the following Piece of Practice, conſidering the Nature and Importance of it, may not be unacceptable to the Public; not only as it tends to eſtabliſh an abſolute Cure for an *Aſcites*, but likewiſe as it may afford us ſome Light in the Treatment of an *Hydrocele*, *Hydrops Pectoris*, *Ovarii*, and other Diſeaſes incident to the human Fabric.

In 1742, among a great many Hydropics that fell under my Care that Year, I was called to the Aſſiſtance of one *Jane Roman*. She was an Inhabitant of the Pariſh of *St. Agnes*, near Fifty Years of Age, and confined to her Bed, under that Species of Dropſy called *Aſcites*, owing its Riſe, ſome Years before, to the Severity of a lingering intermittent Fever. The moſt remarkable of her Complaints were, Loſs of Appetite, difficult Breathing, unquenchable Thirſt, Suppreſſion of Urine, and a ſhort, importunate, aſthmatic Cough, joined to that eſſential Symptom

Symptom of the Diſeaſe, a large Quantity of extravaſated Waters in the Cavity of the *Abdomen*, diſtending it to an enormous Size, and perceptibly fluctuating. Her more inferior Parts were likewiſe ſwoln to an uncommon Magnitude, with livid Spots and Veſications in divers Places. Under theſe Circumſtances, and already ſatiated with tedious Courſes of ineffectual Medicines, I drew from her (*Sept.* 20th) Thirty-ſix Pints of a greeniſh tranſparent Lymph, by a *Paracenteſis* made after the uſual Manner; whereby her Complaints vaniſhed, and ſhe was ſoon re-eſtabliſhed on Foot again. With ſome Part of the extracted Lymph, which I had conveyed to my own Houſe, on my Return thither, I made the following Obſervations:

OBS. I.

Being as warm as it came from the *Abdomen*, with one Pint of it I mixed the like Quantity of freſh *Briſtol* Water; and immediately a ſlight *Coagulum* enſued.

OBS. II.

In mixing equal Parts of warmed Lymph and *Cohore* Claret together, the ſame Phænomenon appeared; the *Coagulum* ſubſided, and the Mixture became milky.

OBS. III.

Being mixed with *Pyrmont* Water, it manifeſted little or no Change, only went turbid.

OBS. IV.

I mixed a Decoction of the *Cortex* with the like Quantity of warm Lymph, and it dropped a branny Sediment.

OBS.

OBS. V.

Lymph *per ſe*, boiled, became gelatinous; but, being mixed with a ſtrong Solution of *Terra foliata Tartari*, it ſoon reſumed its former Fluidity.

OBS. VI.

In bringing the above Mixture to a State of boiling, the Phænomenon of Coagulation appeared more eminently in each of them; eſpecially that with Claret. *Eaton*'s Styptic, Tormentil-roots, Pomegranate-peels, and almoſt every Reſtringent, more or leſs afforded the ſame Appearances of Coagulation.

Notwithſtanding the Diſappearance of the Symptoms, and the favourable Proſpect that enſued the Evacuation of the Waters, the Relief which ſhe had thereby was only temporary, and of a ſhort Duration: For,

Sept. 30. An Inundation again alarmed her, and obliged her forthwith to remove the Bandage, for Fear of Suffocation. Hence, to the latter End of *October*, ſhe re-filled incredibly; and, notwithſtanding any Method uſed to prevent it, within Forty Days after the *Paracenteſis*, there was again collected, in the *Abdomen*, and depending Parts, a Quantity of Lymph, equal to, if not greater than, that which I had but juſt before thence extracted. All her former Complaints, eſpecially the *Dyſpnœa*, likewiſe returned, and oppreſſed her more violently than ever.

Oct. 29. The Waters being ready to break their Confines, and the Pain and Diſtention inſupportable under them, ſhe again deſired my Aſſiſtance to re-

lieve

lieve her. I had, by this time, drawn ſome Concluſions from the above Obſervations on Lymph and Reſtringents, and flattered myſelf, that ſome of them, eſpecially thoſe of the warmeſt kind, applied immediately to the Parts affected, (the ruptured Lymphatics) muſt, according to their known *Modus* of Operation, cloſe up their Mouths, and prevent a further Effuſion of their Contents, and, conſequently, a Return of the Diſeaſe.

In order then to obtain this deſirable End, I reſolved to try their Efficacy, by way of Injection, on the emptied Cavity: And, for this Purpoſe, the Claret and *Briſtol* Water ſeemed to claim the Superiority in my Eſteem; not only as they produced the ſtrongeſt *Coagulum* with Lymph, but likewiſe in being the ſafeſt, and leaſt liable to create any uneaſy Senſations on the *Viſcera*. The Experiment, however, being of a pretty ſingular Nature, I communicated my Sentiments thereof to Dr. *Colwell*, and Dr. *Ruſſell*, Two eminent Phyſicians of our County, and had the Pleaſure of finding them meet in their Approbation: The latter, favouring me with his Preſence, ſaw the Conduct of the whole Affair.

My *Apparatus* was, a large *Trois-quarts*, made on purpoſe, and dipped in Oil; an *Injector*, capable of containing Two or Three Pints, adapted thereto; and Three or Four Gallons of blood-warm Injection, compoſed of equal Parts of *Cohore* Claret, and freſh *Briſtol* Water; beſides Compreſs, Bandage, *&c.* as is uſual on theſe Occaſions. It was conducted pretty near after the Manner following:

Being ſeated on her Bed-ſide, and proper Aſſiſtants attending her, I plunged the *Trois-quart* into the

Abdomen

Abdomen, about Five or Six Inches below, and as much on the Left Side of the *Umbilicus*; and thereby ſoon diſcharged upwards of Twenty Pints of ſuch clear briny Lymph as I had before; which Quantity did not exceed Two Thirds of the Whole, though as much as her Strength could well bear: The Claret and *Briſtol* Water being then in Readineſs, I began to repleniſh the empty Cavity therewith; but I had ſcarce injected Ten or Twelve Pints of it, before a *Syncope*, a very material Obſtruction, made ſome Advances, and would fain baffle my Deſign. Here I perceived the great Expedition neceſſary in conducting this Experiment; that Symptom being more or leſs violent, as I happened to be dextrous, or remiſs, therein; and was, for the moſt part, the only one of Conſequence that attended it. Quickening therefore my Hand as faſt as I was able, and an Aſſiſtant ſtopping the Mouth of the *Cannula* with his Finger, to prevent a Return, I ſoon brought her up to her former Magnitude, and had the Pleaſure thereby of ſeeing the above Symptom ſuſpended. I had then Time to ask her, what kind of Senſation this new Piece of Practice excited within the Cavity? and whether or not ſhe thought herſelf capable of undergoing it a ſecond time? She anſwered me in the Affirmative; and ſaid, It ſeemed as it were entering her Stomach. Notwithſtanding I had Reaſon to believe my Intentions already anſwered, as much as in bringing thoſe Reſtringents in Contact with the Parts affected, yet, as there was a great Quantity of Lymph left behind in the Cavity undiſcharged, which, on account of the *Syncope*, I could not well prevent, I imagined their Action, and full Efficacy, might

thereby be, in ſome degree, interrupted. Every thing therefore being in a favourable Way, I repeated the Mixture for a ſecond Injection (the Claret being in a double Proportion of the Water, to render it the more efficacious for that Purpoſe); drew off the whole Contents of the *Abdomen* to as much as would flow through the *Cannula*; repeated my Injections as before; and once more, without the leaſt Interruption, repleniſhed her therewith.

This total Diſcharge, however, made a great Alteration in the Face of Affairs; and her being full, and under Diſtention, now, altered not, as it did at firſt, the Caſe. A pungent Pain poſſeſſed her Breaſt, frequently darting through all the *Viſcera*; her Breathing became extremely difficult; her Pulſe faltered; the *Syncope* returned; and ſhe became ſpeechleſs. Under theſe Circumſtances it was high time to conclude my Deſign; and therefore, having emptied the Cavity, as well as the Violence of them would permit it, I withdrew the *Cannula*, applied proper Compreſs and Bandage, and finiſhed the Operation after the uſual Manner; which was the more agreeable, as it ended with the perfect Recovery of her Senſes.

The Day following, (*Oct.* 30.) on repeating my Viſit, which I did for divers others ſucceſſively, I had the Pleaſure of finding Things under a favourable Diſpoſition; a gentle *Diaphoreſis*, from a liberal Uſe of Cardiac Medicines, having totally removed the *Syncope*, *Dyſpnœa*, and all other Complaints.

November 12. I renewed my Bandage, and ſet her on Foot again.

The

The 24th I waited on her again for the ſame Purpoſe; found the Swelling in the Extremities going off, her Heart in a chearful Diſpoſition, her Appetite ſtrong, and no Symptom of a Relapſe, as ſhe formerly had long before that time approaching.

Dec. 1. the laſt Viſit I made her, ſhe told me, That there was no further Occaſion for my Aſſiſtance; and that the only Complaint ſhe had then, was, in not having the good Luck to experience this Remedy ſooner. Finding every thing therefore in a favourable Way, her Appetite well, her Urine in due Quantity, her Breathing clear, and the extreme Parts of their natural Size, I left her in Purſuit of that Health which ſhe ſoon acquired, and now enjoys in as eminent a Degree as any other Perſon whatſoever. To conclude; The Integuments, and other Parts of the *Abdomen*, having not yet recovered their former Tone; or, for aught I know, ſome of the Injection being coagulated therein; ſhe ſtill is, and ever has been, ſince the Operation, ſomewhat above her natural Bigneſs: However, it is ſo far from being an Inconvenience to her, that ſhe made me a Viſit, on a trifling Occaſion, a few Days ſince, on Foot; and informed me, that ſhe had, of her own Choice, walked Seven Miles that Morning for the Purpoſe. Her Welfare now is upwards of a Twelvemonth's Standing.